



# **THINGS WE LEARNED THE HARD WAY... SO YOU DON'T HAVE TO.**

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# CASTING ROCKS



## A) FILLING SPACES BETWEEN CASTINGS

∴ CARVING DETAILS IN THE FILLER

∴ DENTAL PICKS

## B) COLORING THE CASTINGS

∴ PAINT PIGMENTS

∴ TUBE ACRYLICS

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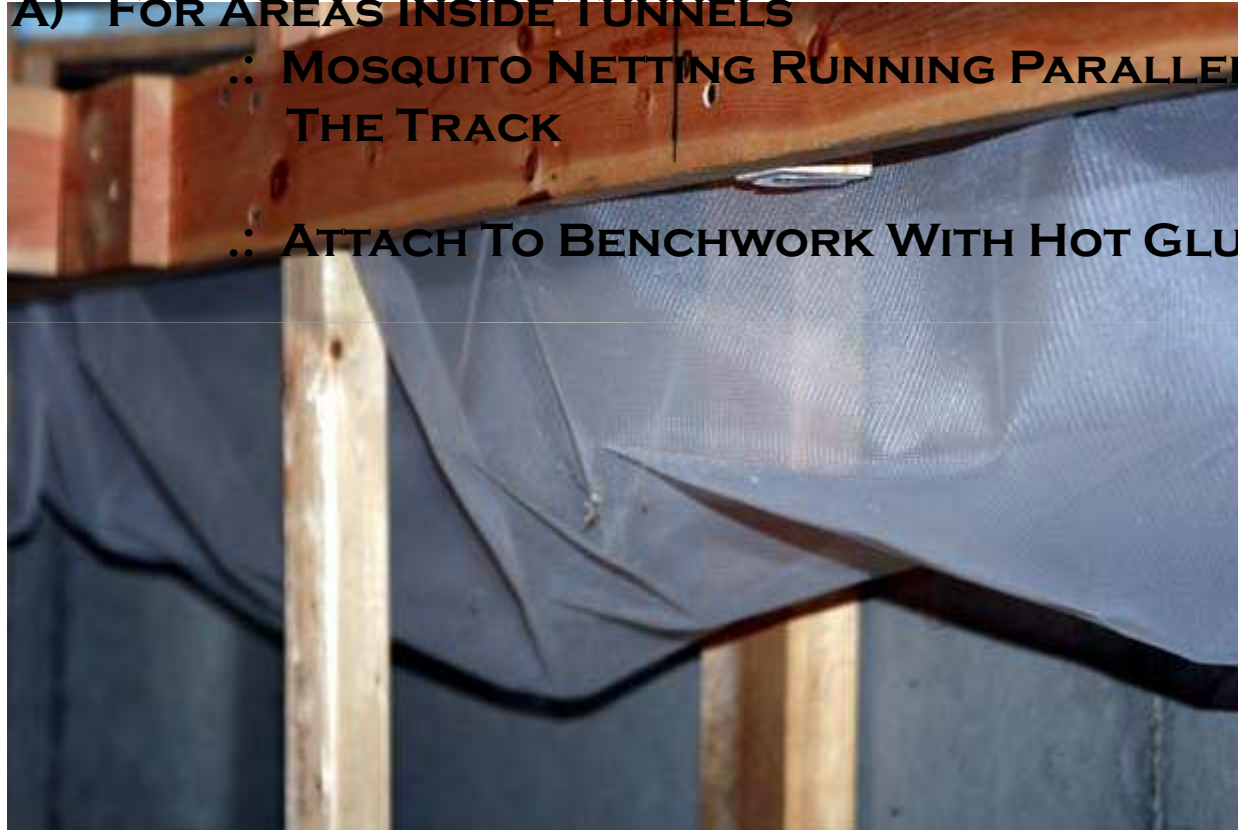
## KEEPING ROLLING STOCK OFF THE FLOOR



**A) FOR AREAS INSIDE TUNNELS**

**∴ MOSQUITO NETTING RUNNING PARALLEL TO  
THE TRACK**

**∴ ATTACH TO BENCHWORK WITH HOT GLUE**



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# STAINING WOOD



## A) STRIPS AND SHEETS

- ∴ WHEN AND WHY YOU STAIN
- ∴ METHODS AND MATERIALS
- ∴ USING PVS PIPE AS A STAIN CONTAINER
- ∴ USING GLASS FOR SHEET WOOD
- ∴ ALWAYS PULL STRIPS THROUGH A RAG.  
**NEVER PUSH!!!**

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# **AUTOMOBILES**



- A) CARS SHOULD BE VARIOUS COLORS WITH SOME CLEAN AND OTHERS DUSTY TO VERY DIRTY**
- B) MAKING WRECKED AND ABANDONED AUTOS**
- C) ADDING RUST AND DUST**
- D) MILKY WHITE WINDOWS**

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# HAND LAID TRACK



- A) USE CA OR PLIOBOND FOR RAPID INSTALLATION THEN SPIKE LATER.**
- B) USE A 1" BELT SANDER TO QUICKLY SHAPE POINTS AND FROGS.**
  - GIVE THE RAIL A SLIGHT BEND AND SAND OFF THE FOOT AND THE SIDE OF THE RAILS HEAD. THEN BEND THE RAIL BACK ON ITSELF. THIS CREATES A REALLY CLEAN FROG.**
- C) USE THE BLACK NYLON BRUSH IN YOUR DREMEL ACCESSORIES TO SHAPE STYRENE INSULATORS.**

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# MAKING MOLDS IN LATEX



- A) YOU CAN USE THESE FOR MORE THAN ROCK MOLDS.  
IF YOU MAKE A DETAIL PART THAT CAN BE CAST IN  
PLASTER THEN MAKE A MOLD OF IT SO YOU CAN MAKE  
MORE.
- B) MAKE THE MOLD AND BUILD A BOX AROUND IT AND  
FILL WITH PLASTER TO CREATE A SUPPORT FOR THE  
MOLD.
- C) USE FOR PLASTER ONLY. **NO RESIN** IN LATEX  
MOLDS!

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# MAKING MOLDS IN RTV



- A) THERE ARE MULTIPLE TYPES OF RTV RUBBER INCLUDING THOSE FOR RESIN AND SOME FOR LOW TEMP METALS.**
- B) OPEN FACED MOLDS**
- C) TWO PART MOLDS. ALWAYS REMEMBER A MOLD RELEASE.**

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# ADDING A BACKDROP



**NOTHING COMPLETES A SCENE LIKE A BACKDROP. PLAN AHEAD AND DO THEM **BEFORE** YOU BUILD YOUR BENCHMARK.**

**FOR GOOD TIPS ON BACK DROPS — GO SEE THE CLINIC THIS WEEKEND BY GARY RUSH. YOU CAN ALSO BUY A VIDEO TAPE THAT WE HIGHLY RECOMMEND BY DARRYL HUFFMAN:**

**DARRYL HOFFMAN  
12020 OLD SEWARD HIGHWAY  
ANCHORAGE, AK 99515**

**DLHUFFMAN@ALASKA.COM**

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## **SCENERY — BUILDING HARDSHELL**



- A) DO NOT USE METAL SCREEN OR CHICKEN WIRE IF YOU ARE USING WIRELESS THROTTLES. IT HAS BEEN KNOWN TO CAUSE INTERFERENCE.**
- B) STACK AND SHAPE FOAM FOR SCENIC CONTOURS. THIS WORKS GREAT WHERE WEIGHT IS CONCERNED.**
- C) CARDBOARD WEBBING FOR SCENIC CONTOURS**
- D) SMALL LAND FORM CAN BE MADE OF ROLLED UP PAPER.**

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# ADDING DETAIL TO THE ROADBED



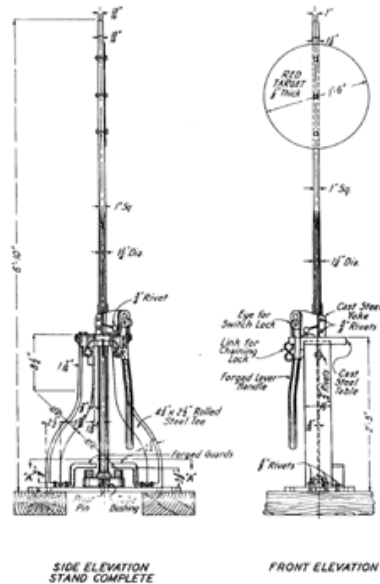
- A) USE RUBBING ALCOHOL THEN WHITE GLUE AND WATER TO SECURE BALLAST IN PLACE.
- B) NARROW GAUGE/LOGGING – YOUR BALLAST MAY BE ONLY DIRT AND WEEDS.
- C) A ‘NICE’ TOUCH WOULD BE AN OCCASIONAL AIR HOSE TOSSED BETWEEN THE RAILS, SOME TIE PLATES AND OTHER ITEMS OF DEBRIS, SWITCH STANDS OR MOTORS.

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# Scratch Building Switch Stands

Plastruct part numbers and sizes:

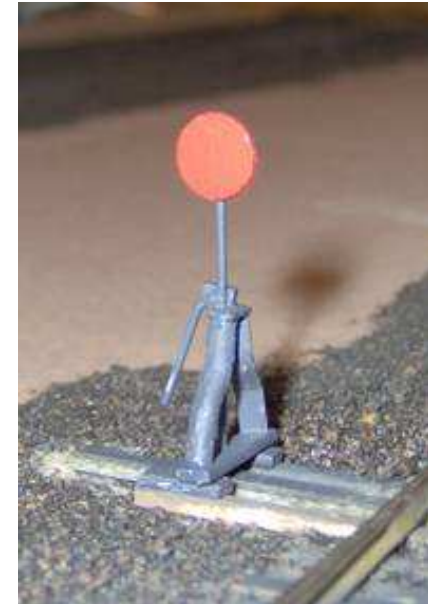
90724 - .020" X .080"  
 90745 - .040" X .100"  
 90882 - .080" Half Round  
 90852 - .025" Round



1) First, I cut the round target. I used a hole punch on some .016" sheet styrene.

2) Cut two pieces of half round at 3 foot lengths. You can bend the arch with your fingers. Put the crimps in 1 foot from each edge.

3) Cut a piece of the .020" X .080" @ 9 scale inches. This becomes the top plate for the stand. Drill a hole in the center of the plate with a bit big enough to get the .025" rod through it. MEK the two pieces cut in step to the plate. Be sure to keep the edges flush.



- 4) Glue the wide end of the base down to a 5 foot piece of .040" X .100". This should be more than enough to span the ties on the turnout. Whatever is overhanging can be cut off and used to space the stand up if you need clearance for the throw bar.
- 5) Cut the 2 pieces of rod. 1 at 7 feet and 1 at 3 feet. MEK the 7 foot piece through the hole drilled into the top plate and to the base. The rod turns out very soft so I would really recommend brass wire for this part. Parts will have to be CA'd together instead of using MEK.
- 6) Cut a small piece of the .040" X .100" approximately 3 scale inches wide. This will represent the lock mechanism. MEK this to the top plate next to the staff. This will stick out past the side edge of the plate. This is OK since the mechanism did the same.
- 7) Crimp a bend in the 3 foot piece of rod. Just 4 or 5 scale inches from one end. This is the handle for the stand. MEK the crimped in next to the block you just MEK'd in place and against the staff. While on the prototype the handle would have come out of this the block and the staff would have gone through the block, in HO this is close enough that without close study the eye doesn't know the difference.
- 8) MEK one of the punched circles to the top of the staff.
- 9) Paint and mount it. I painted mine with Floquil weathered black and the targets are red for the mainline and yellow for sidings. I mount mine to the ties with ACC.

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# **CASTING PLASTER BUILDINGS OR BUILDING PLASTER KITS.**



- A) USE TRIANGLE-SHAPED STYRENE FOR THE SIDES OF THE MOLD BOX TO CREATE YOUR WALLS WITH THE 45 DEGREE ANGLE BUILT IN.**
  
- B) BUILD THE MOLD ON THE BACK SIDE OF A VACUUM FORMED STYRENE SHEET TO TAKE ADVANTAGE OF THE STONE OR BRICK SHAPE TO ADD THE TEXTURE TO THE FRONT OF THE CASTING.**

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# GENERAL TIPS AND TECHNIQUES



- A) USE AN UPSIDE DOWN SHOT GLASS FOR WHITE GLUE.**
- B) ALWAYS USE SHARP BLADES IN YOUR X-ACTO KNIFE.**
- C) A CORK WITH ONE SIDE CUT OFF WILL KEEP YOUR X-ACTO KNIFE FROM ROLLING OFF THE TABLE AND INTO YOUR LEG. THE ADD-ON PENCIL ERASERS WORK WELL FOR THIS ALSO.**
- D) USING PASTELS, BRAGDON POWDERS AND COLORED PENCILS FOR WEATHERING.**
- E) FADING LETTERING WITH A THINNED APPLICATION OF THE BASE COLOR. BE CAREFUL AROUND CAR NUMBERS.**
- F) KEEP SCRAPS FROM BUILDING PROJECTS — THEY MAKE GOOD JUNK PILES AND LOADS.**
- G) ALWAYS KEEP A BOTTLE OF NAIL POLISH REMOVER WITHIN REACH WHEN WORKING WITH CA. PLEASE...AS ME HOW I KNOW THIS.**

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# GENERAL TIPS AND TECHNIQUES



- H) BUY HYDROCAL IN BULK – TRINITY CERAMICS IN DALLAS IS A GOOD SOURCE. YOU HAVE TO BUY IT IN 100 LBS BAGS. STORE THIS IN 5 GALLON, SEALABLE PAINT BUCKETS FROM HOME DEPOT. IT WILL KEEP FOR YEARS.**
- I) WATCH HOBBY LOBBY’S WEBSITE FOR 40% OFF COUPONS – GREAT FOR GROUND FOAM, BRUSHES, MINI-METAL’S CARS AND SUCH.**
- J) WATCH FOR ‘MOM FRIENDLY’ HOLIDAYS AS ACRYLIC PAINTS ARE OFTEN ON SALE ON THESE DAYS.**
- K) DO AS MUCH ‘WET WEATHERING’ AS POSSIBLE WHILE THE PARTS ARE IN THE FLAT (WOOD PROJECTS) TO AVOID WARPED WOOD.**
- L) WE DISAGREE WITH “DCC FRIENDLY”. IT IS OUR OPINION THAT IF THE WHEELS ARE IN CORRECT GAUGE AND THE TURNOUT IS BUILT TO SPECIFICATIONS THERE WON’T BE WHEEL SHORTS.**
- M) IF YOUR DRIVERS SHORT IN TURNOUTS APPLY SOME CLEAR NAIL POLISH TO THE BACK SIDE OF THE DRIVERS. (THIS ALSO WORKS FOR CARS THAT MIGHT BE SHORTING OUT THE ‘NON-DCC FRIENDLY’ TURNOUTS).**

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# GENERAL TIPS AND TECHNIQUES



- N) USE A PAINT STIRRING STICK WITH DOUBLE FACED TAPE FOR PAINTING FIGURES AND SMALL ITEMS.**
- O) STRAWS AND COFFEE STIRRING STRAWS CAN BE USED FOR PIPES, CULVERTS AND OTHER ITEMS.**
- P) DON'T THROW OUT THE OLD WIND UP ALARM CLOCK OR BUY THEM AT YARD SALES. THEY ARE A GREAT SOURCE FOR SMALL GEARS THAT LOOK GREAT AS MACHINERY INSIDE BUILDINGS OR IN JUNK PILES OR LOADS.**
- Q) WHEN CUTTING OPENINGS FOR WINDOWS AND DOORS DRILL A SMALL HOLE IN EACH CORNER. IF THE MATERIAL SPLITS DURING THE CUT IT HAS A PLACE TO STOP.**
- R) WHEN WORKING WITH WOOD DO NOT TRY TO CUT ALL THE WAY THROUGH WOODEN SIDING IN A SINGLE CUT. MAKE SEVERAL PASSES TO COMPLETE THE CUT.**
- S) FUTURE FLOOR POLISH FOR GLUING IN WINDOW GLASS.**

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# Questions?

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